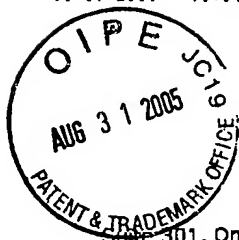


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TO:	USPTO	FAX NO.:	703/746-9195
FROM:	Daniel N. Calder	ADMIN. ASST.:	Fran Petrillo
APPLN. NO.:	10/524,335	ATTY. DOCKET NO.:	MAT-8666US
TITLE OF APPLN.: POWER SUPPLY APPARATUS FOR VEHICLE (AS AMENDED)			
FILING DATE:	February 11, 2005	ART UNIT:	3683
FIRST INVENTOR:	Toshihiko OHASHI, et al.	CONF. NO.:	6948
TITLE OF DOCUMENT (and List of Attachments): REQUEST FOR CORRECTED FILING RECEIPT			
CUSTOMER NO. 23122			

Total Number of Pages: 12 (including this form)

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<b>TRANSMITTAL FORM</b> (to be used for all correspondence after initial filing)	Application Number	10/524,335
	Filing Date	February 11, 2005
	First Named Inventor	Toshihiko OHASHI, et al.
	Art Unit	3683
	Examiner Name	To Be Assigned
	Attorney Docket No.	MAT-8666US
Total Number of Pages in This Submission //		

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Firm Name	RatnerPrestia		
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Date	August 31, 2005	Reg. No.	27,424

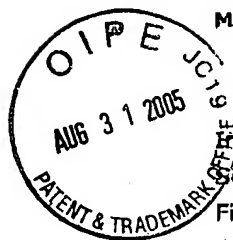
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MAT-8666US

PATENT



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Toshihiko OHASHI, et al.

Serial No.: 10/524,335

Group No.: 3683

Filed: February 11, 2005

Examiner: To Be Assigned

For: POWER SUPPLY APPARATUS FOR  
VEHICLE (AS AMENDED)

**Filing Receipt Corrections**  
**Office of Initial Patent Examination**  
**Commissioner for Patents**  
**P.O. Box 1450**  
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Fax Number: (703) 746-9195

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1. Attached is a copy of the official filing receipt received from the PTO in the above application for which issuance of a corrected filing receipt is respectfully requested.

2. There is an error with respect to the following data:

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*Error in*

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2. ☒ Applicants' address
3. ☒ Title
4. ☐ Filing Date
5. ☐ Serial Number
6. ☐ Foreign/PCT Application Reference
7. ☐ Other

*Correct data*

- 1.
2. Osaka, JAPAN; Osaka, JAPAN
3. POWER SUPPLY APPARATUS FOR  
VEHICLE (per Preliminary Amendment filed  
02/11/05)
- 4.
- 5.
- 6.
- 7.

3. No fee is due.

Respectfully submitted,

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*Daniel N. Calder*

Daniel N. Calder, Reg. 27,424

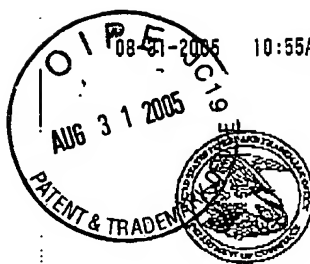
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*Fran Petrillo*  
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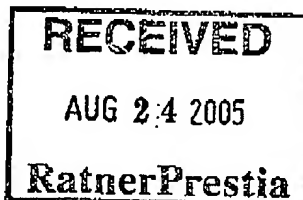
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10/524,335	02/11/2005	3683	900	MAT-8666US	7	10	1

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CONFIRMATION NO. 6948  
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## Applicant(s)

*Osaka*  
Toshihiko Ohashi, ~~Hirakata-shi~~, JAPAN;  
Yousuke Mitani, ~~Tokatsuki-shi~~, JAPAN;

Power of Attorney: The patent practitioners associated with Customer Number 23122.

## Domestic Priority data as claimed by applicant

This application is a 371 of PCT/JP04/09686 07/01/2004

## Foreign Applications

JAPAN 2003-193426 07/08/2003

Projected Publication Date: 11/24/2005

Non-Publication Request: No

Early Publication Request: No

## Title

*apparatus*  
Power supply for vehicle

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T-529 P.005/012 F-845



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MAT-8666US

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application No: To Be Assigned  
Applicant: Toshihiko OHASHI, et al.  
Filed: Herewith  
Title: POWER SUPPLY APPARATUS FOR VEHICLE  
(AS AMENDED)  
TC/A.U.: To Be Assigned  
Examiner: To Be Assigned  
Confirmation No.: To Be Assigned  
Docket No.: MAT-8666US

**PRELIMINARY AMENDMENT**

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Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Prior to examination, please amend the above-identified application as follows:

- ☒ **Amendments to the Title** begin on page **2** of this paper.
- ☒ **Amendments to the Specification** begin on page **3** of this paper.
- ☒ **Amendments to the Claims** are reflected in the listing of claims which begins on page **4** of this paper.
- ☒ **Amendments to the Drawings** begin on page **7** of this paper and include an attached replacement sheet.
- ☐ **Amendments to the Abstract** are on page      of this paper. A clean version of the Abstract is on page      of this paper.
- ☐ **Remarks/Arguments** begin on page      of this paper.



10:56AM

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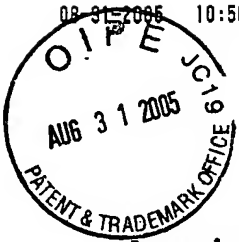
T-529 P.006/012 F-945

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**Amendments to the Title:**

Please replace the title with the following:

| POWER SUPPLY APPARATUS FOR VEHICLE



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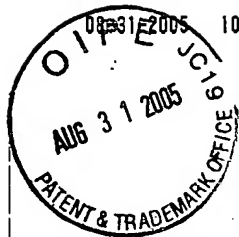
**Amendments to the Specification:**

Please add the following new paragraph after the Title and before the first paragraph on page 1:

THIS APPLICATION IS A U.S. NATIONAL PHASE APPLICATION OF PCT INTERNATIONAL APPLICATION PCT/JP2004/009686.

Please replace the paragraph, beginning at page 1, line 25, with the following rewritten paragraph:

In this type of power supply apparatus for a vehicle, since an auxiliary power supply is responsible for braking of a vehicle in an emergency, it is extremely important to supply electric power ~~to from~~ the auxiliary power supply reliably in an emergency. Therefore, it is important to surely predict the lifetime of the auxiliary power supply and to detect a state of the auxiliary power supply at any time.



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**Amendments to the Claims:** This listing of claims will replace all prior versions, and listings, of claims in the application

**Listing of Claims:**

1. (Original) A power supply apparatus for a vehicle, comprising:

an electronic controller for outputting information for controlling braking of the vehicle to a brake based on at least one of information from a brake pedal and information in response to a moving state of the vehicle;

a battery for supplying electric power to the brake via the electronic controller;

an auxiliary power supply including a capacitor unit formed of a plurality of capacitors and a detection unit for detecting an abnormality in the capacitor unit, the auxiliary power supply supplying electric power to the brake via the electronic controller when the battery is in an abnormal state;

wherein, in charging or discharging the capacitor unit, the detection unit measures an internal resistance value of the capacitor unit, measures an internal capacitance value of the capacitor unit from a rate of change of voltage per unit time of the capacitor unit, and detects an abnormality in the capacitor unit based on the measured internal resistance value and internal capacitance value.

2 (Original) The power supply apparatus for a vehicle according to claim 1, wherein, in charging the capacitor unit, the detection unit measures an internal resistance value of the capacitor unit from a voltage obtained when charging is started or a voltage obtained when the charging is interrupted, and measures an internal capacitance value of the capacitor unit from a rate of the change of voltage per unit time of the capacitor unit in charging.

3. (Original) The power supply apparatus for a vehicle according to claim 1, wherein, in discharging the capacitor unit, the detection unit measures an internal resistance value of the capacitor unit from a voltage obtained when discharging is started or a voltage obtained when the discharging is interrupted, and measures an internal capacitance value of





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the capacitor unit from a rate of change of voltage per unit time of the capacitor unit in discharging.

4. (Currently Amended) The power supply apparatus for a vehicle according to claim 2,

wherein the detection unit measures temperature of the capacitor unit in the charging,

corrects the internal capacitance value and the internal resistance value at each temperature based on a capacitance value difference and a resistance value differences between each of the measured internal capacitance value and the measured internal resistance value and each of a standard internal capacitance value and a standard internal resistance value of the capacitor unit, which are initialized in advance, at the temperature measured in the charging, and

judges whether or not the capacitor unit is in a normal state by comparing the corrected internal resistance value with a limit internal resistance value with respect to the corrected internal capacitance value, at the each temperature.

5. (Currently Amended) The power supply apparatus for a vehicle according to claim 3,

wherein the detection unit measures temperature of the capacitor unit in the discharging,

corrects the internal capacitance value and the internal resistance value at each temperature based on a capacitance value difference and a resistance value differences between each of the measured internal capacitance value and the measured internal resistance value and each of a standard internal capacitance value and a standard internal resistance value of the capacitor unit, which are initialized in advance, at the temperature measured in the discharging, and



MAT-8666US

judges whether or not the capacitor unit is in a normal state by comparing the corrected internal resistance value with a limit internal resistance value with respect to the corrected internal capacitance value, at the each temperature.

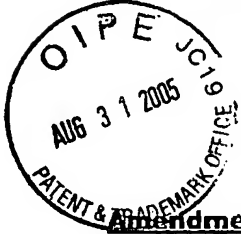
6. (Currently Amended) The power supply apparatus for a vehicle according to any of claims 1 to 5, wherein the rate of change of voltage is measured multiple times every predetermined time.

7. (New) The power supply apparatus for a vehicle according to claim 2, wherein the rate of change of voltage is measured multiple times every predetermined time.

8. (New) The power supply apparatus for a vehicle according to claim 3, wherein the rate of change of voltage is measured multiple times every predetermined time.

9. (New) The power supply apparatus for a vehicle according to claim 4, wherein the rate of change of voltage is measured multiple times every predetermined time.

10. (New) The power supply apparatus for a vehicle according to claim 5, wherein the rate of change of voltage is measured multiple times every predetermined time.



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**Amendments to the Drawings:**

Please delete page "7/7" of the drawings, also labeled as "Reference numerals in the drawings" in its entirety.

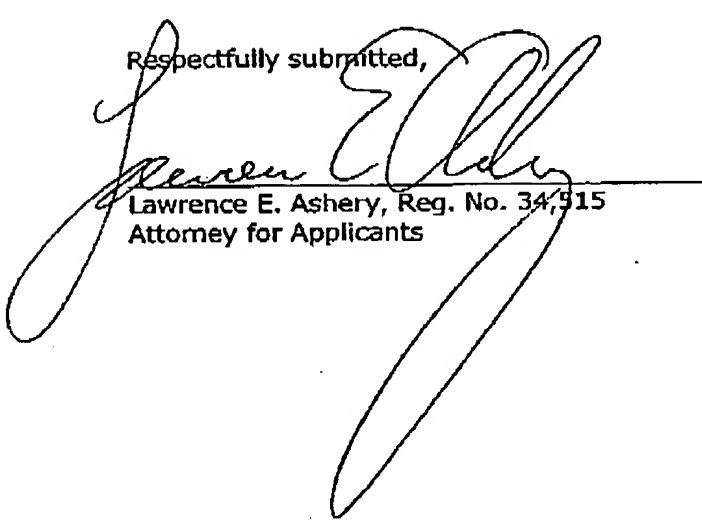
The attached sheet of drawings includes changes to Figure 3. This sheet replaces the original sheet.

Attachment



MAT-8666US

Respectfully submitted,

  
Lawrence E. Ashery, Reg. No. 34,915  
Attorney for Applicants

LEA:ds

Attachment: Figure 3 (1 sheet)

Dated: February 11, 2005

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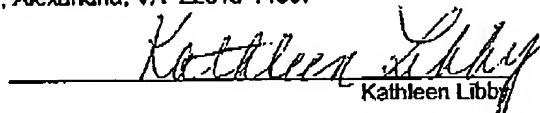
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